



STATE OF NEVADA

Department of Conservation & Natural Resources

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

DIVISION OF ENVIRONMENTAL PROTECTION

Colleen Cripps, Ph.D., Administrator

FACTSHEET (Pursuant to NAC 445A.236)

PERMITTEE NAME:

Mr. Gasket, Incorporated
550 Mallory Way
Carson City, Nevada 89701

PERMIT NUMBER:

NV0021512

LOCATION:

Mr. Gasket, Incorporated
550 Mallory Way
Carson City, Nevada 89701

COORDINATES:

Latitude **39° 09' 14" N** Longitude. **-119° 45' 39" W**
Township - **16N,** Range - **20E,** Section - **20.**

FLOW:

Maximum flow - **0.0432 MGD** (30 gallons per minute)

PUBLIC WATER SUPPLY:

There are no public supply wells within one (1) mile of this facility.

CORRECTIVE ACTIONS SITES:

There are three (3) Bureau of Corrective Actions remediation sites located within a five-mile radius from the center-point of the this property.

WELLHEAD PROTECTION AREA:

This facility is located outside of the 3,000 feet and within 6,000 feet Drinking Water Protection Area (**DWPA**).

GENERAL:

Mr. Gasket, a manufacturer of performance auto parts, operates a facility in Carson City, originally used by their subsidiary, Mallory Inc., for the production of performance ignition systems. During the early period of operation, Mallory Inc. impacted the groundwater below the site and down-gradient with chlorinated hydrocarbons. In 1988, Mr. Gasket (Mallory) initiated groundwater remediation activities for the removal and recovery of chlorinated hydrocarbons, using an air stripping/activated carbon groundwater treatment system with a maximum capacity of 30 gallons

per minute (gpm). The groundwater recovery system consists of three (3) recovery wells. Plume boundaries were originally estimated to extend approximately 850 feet in a northeast direction, migrating across Carson City Governor’s Field toward Linear Ditch. Since September 1989, discharge from the on-site pump-and-treat remediation system has been discharged to Linear Ditch, which ultimately discharges to the Carson River.

RECEIVING WATER CHARACTERISTICS:

Treated groundwater is discharged from the air stripping/carbon polish system to a nearby storm drain leading to Linear Ditch. Studies have indicated that Linear Ditch is a losing stream downstream of the Mr. Gasket storm drain discharge location, and recharges groundwater. Relatively long periods of losing conditions were substantiated by: (1) pumping within the remediation target area has effectively lowered the groundwater table and increased the head differential between the Ditch and the surrounding groundwater, and (2) the dry-ditch conditions within 1 to 2 miles downstream of the Mr. Gasket discharges that frequently occur due to the ephemeral nature of the losing stream (Linear Ditch).

The Permittee’s treatment system discharges to the Linear Ditch, ultimately flowing to the Carson River. The Carson River has assigned water quality standards, and therefore, tributary systems contributing to the Carson River are subject to these water quality criteria. The upstream and downstream water quality control points for the discharge are New Empire and Mexican Ditch, respectively, as listed in Nevada Administrative Code [NAC 445A.1814](#). The beneficial uses for the Carson River are: irrigation, watering of livestock, recreation involving contact with the water, recreation not involving contact with water, industrial supply, municipal or domestic supply, or both, propagation of wildlife and propagation of aquatic life. For the reach of the Carson River in question, the species of major concern are smallmouth bass, rainbow trout and brown trout.

Pertinent water quality and flow monitoring data for the Carson River at the Mexican Ditch Gage station have been reported as the following:

Table - 1: CARSON RIVER PARAMETERS:

Parameter	CARSON RIVER PARAMETERS			
	Maximum	Minimum	Average	Water Quality Standard
Total Nitrogen (mg/l)	1.2	0.18	0.5	Annual Average ² : ≤1.3 Single Value ² : ≤1.7
Nitrate as N (mg/l)	0.2	<0.1	0.1	Single Value ¹ : ≤10
Nitrite as N (mg/l)	0.01	<0.01	<0.01	Single Value ¹ : ≤0.06
Total Dissolved Solids (mg/l)	488	56	192	Annual Average ¹ : ≤500
Total Phosphate as P (mg/l)	0.5	0.07	0.02	Annual Average ¹ : ≤0.10
pH (Standard Units)	9	7.5	8.1	6.5 to 9.0 ¹
Flow (CFS)	1616	10	101 ³	NA

Applicable Definitions:

1. Water Quality Standard for Beneficial Use.
2. Requirements to Maintain Existing Higher Quality.
3. Average Carson River flow of 101 CFS= 45,283.9 gallons per minute.
4. mg/L - milligram per liter CFS - Cubic feet per second.

Additional monitoring requirements for all categories may be added at the Division’s discretion. Surfacing of any substance from a system is strictly prohibited. The Permittee is required to implement an Operations & Maintenance (O & M) manual with operational policies that ensure proper equipment operation and compliance with the terms and conditions of this general permit.

DISCHARGE FLOW AND CHARACTERISTICS

During the period starting January 2006 through December, 2011, the average monthly discharge from the Permittee’s treatment unit was 0.0057 MGD and highest daily discharge was 0.0246 MGD; both these values are within permit limits. Permit limits were not exceeded during the current permit period.

Generally, the discharge from the treatment system has the following characteristics:

Table - 2: Discharge Flow and Characteristics

Parameter	Current Parameters		Monitoring Requirements	
	Maximum	Minimum	Average	Permit Limit
1,1,1 Trichloroethane (mg/l)	0.006	ND	ND	0.2
Trichloroethene (mg/l)	ND	ND	ND	0.005
1,1 Dichloroethane (mg/l)	ND	ND	ND	0.02
1,2 Dichloroethane (mg/l)	ND	ND	ND	0.005
1,1 Dichloroethene (mg/l)	ND	ND	ND	0.007
Cis-1-2 Dichloroethene (mg/l)	ND	ND	ND	0.07
Carbon Tetrachloride (mg/l)	ND	ND	ND	0.005
Toluene (mg/l)	ND	ND	ND	0.012
Total Phosphate as P (mg/l)	1.9	0.11	0.37	Monitor & Report
Total Nitrogen (mg/l)	10	3.8	7.5	Monitor & Report
Total Dissolved Solids (mg/l)	955	750	870	Monitor & Report
pH (Standard Units)	8.63	8.08	8.16	6.5 to 9.0

Applicable Definitions: ND = Non detect at detection limit of 0.005 mg/l

Discharge from the treatment system has consistently met permit limitations for volatile hydrocarbons. However, elevated concentrations of nitrate, phosphate, and total dissolved solids (TDS) have been reported in the discharge. These constituents are believed to be from historical septic tanks, leach fields, and other nonpoint sources in the area, and have not been attributed to the Mr. Gasket site contamination. Because the highest reported flow (34.3 gallons per minute)

from the Mr. Gasket facility constitutes only 0.8% of the lowest reported Carson River stream flow (4488 gallons per minute), it is believed that the Mr. Gasket discharge will not significantly impact the Carson River water quality due to these constituents.

PROPOSED EFFLUENT LIMITATIONS, MONITORING REQUIREMENTS AND SPECIAL CONDITIONS:

Effluent discharge compliance samples shall be collected at the end-of-pipe (Outfall 001) discharging to the storm drain that leads to the Linear Ditch. Discharge from the treatment system shall be limited and monitored according to the following:

- a. Discharge shall be limited and monitored by the Permittee as specified below in **Table – 1:**

Table – 1: Effluent Discharge Limitation:

Parameter	Permit Limits		Monitoring Requirements	
	Minimum	Maximum	Frequency	Sample Type
Flow (MGD)	Monitor & Report	0.0432	Continuous	Flow Meter
1,1,1-Trichloroethane (mg/L)	Monitor & Report	0.2	Monthly	Discrete
Trichloroethene (mg/L)	Monitor & Report	0.005	Monthly	Discrete
1,1-Dichloroethane (mg/L)	Monitor & Report	0.02	Monthly	Discrete
1,2-Dichloroethane (mg/L)	Monitor & Report	0.005	Monthly	Discrete
1,1-Dichloroethene (mg/L)	Monitor & Report	0.007	Monthly	Discrete
Cis-1,2-Dichloroethene (mg/L)	Monitor & Report	0.07	Monthly	Discrete
Carbon Tetrachloride (mg/L)	Monitor & Report	0.005	Monthly	Discrete
Toluene (mg/L)	Monitor & Report	0.012	Monthly	Discrete
Total Phosphorus (P) (mg/L)	Monitor & Report		Monthly	Discrete
Total Nitrogen (N) (mg/L)	Monitor & Report		Monthly	Discrete
Total Dissolved Solids (TDS) (mg/L)	Monitor & Report		Monthly	Discrete
pH - Standard Units	6.5 - 9.0		Monthly	Discrete

Applicable Definitions: **MGD:** Million gallons per day **mg/L:** Milligrams per liter

SCHEDULE OF COMPLIANCE:

The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance.

- a. The Permittee shall achieve and/or maintain compliance with all effluent limitations upon issuance of the permit;
- b. **By August 25th, 2012** the Permittee shall submit to **NDEP** an updated **Operations & Maintenance manual (O & M)** for this facility; if the **O & M Manual** currently on file is up to

date, please submit a letter stating so.

RATIONALE FOR PERMIT REQUIREMENTS:

The permit requires routine monitoring, implementation of Best Management Practices (**BMP**), **O & M Manual** and reporting to ensure the site is performing at a level that minimizes water pollution and protects public health and the environment. Permit requirements are designed to be consistent with drinking water quality and/or the Carson River Water Quality Standards, as applicable.

Flow:

The discharge flow rate is limited by the design capacity of the treatment system. Maximum flow is permitted at 30 gpm - 0.0432 MGD.

Volatile Hydrocarbon and Chlorinated Hydrocarbon Compounds:

Discharge limitations for Trichloroethene, and its degradation products 1,1,1-Trichloroethane and cis-1,2-Dichloroethene, are based on primary drinking water standards. These compounds are tested using EPA 8260 testing protocol. Monthly monitoring for other hydrocarbons of interest in previous permits (1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethene, Carbon Tetrachloride, and Toluene) have been continued in this permit renewal because these constituents are included in the full 8260 analysis and nothing would be gained from dropping them.

Total Phosphates, Nitrate, and Total Dissolved Solids:

Water samples collected from the Linear Ditch up-gradient from the Mr. Gasket discharge have exhibited nutrient concentrations at or above water quality standards for the Carson River, as listed in NAC 445A.154. Total Phosphates, Nitrate, and Total Dissolved Solids shall be monitored and reported to ensure that the Mr. Gasket discharge does not significantly contribute to any increase of these constituents in the Carson River.

pH:

pH will be monitored to ensure the discharge continues to meet Carson River Standards as listed in **NAC 445A.154**.

OPERATION REQUIREMENTS:

The Permittee shall operate the facility in compliance with permit provisions and requirements and in accordance with the Division-approved Operations and Maintenance Manual (**O & M Manual**). The **O & M Manual** shall contain information required to comply with this permit.

PROPOSED DETERMINATION:

The division has made the tentative determination to renew the proposed permit, under the provisions prescribed, for a 5-year period. Under **NAC 445A.232**, this permit is classified discharge of domestic wastewater of less than 50,000 gallons.

PROCEDURES FOR PUBLIC COMMENT:

The Notice of the Division's intent to issue a discharge permit to the applicant, subject to the

conditions contained within the permit is being sent to the **Nevada Appeal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of thirty (30) days following the date of publication of the public notice in the newspaper. The comment period can be extended at the discretion of the Administrator. The deadline date and time by which all comments are to be submitted (via postmarked mail or time-stamped faxes, e-mails, or hand-delivered items) to the Division is **June 25th, 2012 by 5:00 P.M.**

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with **NAC 445A.238**. The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to **NRS 445A.605**.

The application and proposed permit on file and may be copied or copies may be obtained by writing or by calling **Alexi Lanza, P.E.**, Bureau of Water Pollution Control at **(775)687-9468**; fax: **(775)687-4684**; or email: alanza@ndep.nv.gov. This notice and the fact sheet can be viewed online at the following web address: <http://ndep.nv.gov/admin/public.htm>

Prepared by: **Alexi Lanza, P.E.**
Nevada Division of Environmental Protection
Bureau of Water Pollution Control - Permits Branch
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